

**IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA**

MARY ELIZABETH JORDAN  
FLICKINGER et al.,

Plaintiffs,

v.

TOYS R US, INC. et al.,

Defendants.

CIVIL ACTION NO. 3:10-CV-305

(JUDGE CAPUTO)

**MEMORANDUM**

The issue before the Court is whether or not to exclude the expert reports and testimony of Dr. Robert J. Nobilini. For the reasons set forth below, they will be excluded.

**BACKGROUND**

An extensive factual background to this suit need not be rehearsed here. Suffice to say, this personal injury case was filed against Toys “R” Us, Inc. and related corporations (collectively, Toys “R” Us). One of the plaintiffs, Mary Elizabeth Jordan Flickinger, alleges she was severely injured at Toys “R” Us’ flagship store in Times Square when a plastic bin from a bulk candy dispenser detached from a display carousel, striking and injuring her. Mrs. Flickinger brought a negligence claim, her spouse brought a loss of consortium claim, and her children brought negligent infliction of emotional distress claims against Toys “R” Us.

As part of their Omnibus Motion in Limine (Doc. 87), Plaintiffs’ moved to exclude Dr. Nobilini’s testimony and reports under Federal Rule of Evidence 702. Dr. Nobilini, a biomechanical engineer, has prepared three reports for the Defendants. These reports address two distinct issues: (1) how the accident occurred, i.e. who and/or what caused the

bin to come out of the display, and (2) if the impact was sufficient to generate the injuries Plaintiff is alleging. Dr. Nobilini concluded that the bin dislodged essentially as the result of defective design combined with excessive force being applied to the lever that dispensed the candy, and that the impact Mrs. Flickinger sustained could not have created the injuries she claims she sustained. The motion has been fully briefed and a *Daubert* hearing has been held.

### **DISCUSSION**

#### **I. Evaluating Expert Testimony**

Dr. Nobilini's expert testimony as to the causes of the accident and the impact sustained by Mrs. Flickinger will be excluded for failing to meet the requirements of Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 709 (1993).

##### **A. Fed. R. Evid. 702 and *Daubert***

Rule 702 of the Federal Rules of Evidence, consistent with *Daubert*, 509 U.S. at 579, provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

The trial judge is to act as a gatekeeper to make sure that all expert testimony or evidence is both relevant and reliable. *Id.* at 589. Expert testimony "must be supported by appropriate validation – i.e., 'good grounds,' based on what is known." *Id.* at 592. "Put

differently, an expert opinion must be based on reliable methodology and must reliably flow from that methodology and the facts at issue-but it need not be so persuasive as to meet a party's burden of proof or even necessarily its burden of production." *Heller v. Shaw Industries, Inc.*, 167 F.3d 146, 152 (3d Cir.1999).

The Third Circuit has explained that, under Fed. R. Evid. 702, expert testimony "(1) must be based on sufficient facts and data; (2) must be the product of a reliable methodology; and (3) must demonstrate a relevant connection between that methodology and the facts of the case." *Jaasma v. Shell Oil Co.*, 412 F. 3d 501, 513 (3d Cir. 2005).

In evaluating the reliability of a particular scientific methodology, a district court should take into account the following non-exclusive factors:

(1) whether a method consists of a testable hypothesis; (2) whether the method has been subject to peer review; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique's operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put.

*In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 742 n. 8 (3d Cir.1994); *Daubert*, 509 U.S. at 593-94. In assessing reliability, "[t]he 'ultimate touchstone is helpfulness to the trier of fact, and with regard to reliability, helpfulness turns on whether the expert's technique or principle [is] sufficiently reliable so that it will aid the jury in reaching accurate results.'" *Paoli*, 35 F.3d at 744 (citations omitted).

Finally, *Daubert* requires that the proponent of expert testimony must prove the testimony as valid and applicable to the facts at issue in the matter by a preponderance of proof, following the requirements of Fed. R. of Evid. 104(a). *Daubert*, 509 U.S. at 592-93.

**B. Applying the Framework to the Reports**

**1. The Sufficiency of the Facts and Data Underlying Dr. Nobilini's Reports**

Here, since there was no dispute over Dr. Nobilini's qualifications as a biomechanical engineer, the Court will immediately turn to first determining whether, under Fed. R. Evid. 702, Dr. Nobilini's reports were based on *sufficient facts and data*.

**(a) Position of Plaintiff at Time of Accident**

In the reconstruction of the accident found in Dr. Nobilini's initial report, the testing considered the Plaintiff standing squarely in front of the candy bin in an erect position. Moreover, he considered Plaintiff in this position ten and thirteen inches away from the bin. However, there is evidence that Plaintiff was not standing erect when the bin struck her. Dr. Nobilini did not consider this. In addition, Dr. Nobilini tested only a force directly applied to the Plaintiff's head as if the impact was head-on. Given the physical evidence that Plaintiff was struck on the right side of her forehead, Dr. Nobilini should have considered rotational forces as well.<sup>1</sup> This lack of variation clearly affected Dr. Nobilini's results with respect to the impact Mrs. Flickinger sustained in the accident, since, for instance, the impact would clearly be greater if she had been crouching or stooped over rather than standing upright when the bin fell.

**(b) Similarity of Mock-Up to the Configuration of the Actual Bin and Display**

Since the actual bin and display, as well as the actual plans, had been discarded by Toys R Us prior to Dr. Nobilini's testing, Dr. Nobilini, in designing his mock-up, relied on photographs and discussions with the manufacturer. However, the Court is left with

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<sup>1</sup> Dr. Nobilini testified that rotational forces were insignificant, but he never tested them, and there was opposing expert testimony that they should have been.

significant doubts as to the mock-up display's similarity to the configuration of the actual bin assembly involved in the accident – doubts that the Court finds substantially undermine the reliability of Dr. Nobilini's opinions as to how the accident was caused and whether it was the result of a design defect with the bin assemblage. The base plate on the mock-up is not the same as that which was on the actual bin on the carousel in at least two respects. First, the plate did not have a lip on the end projecting outwardly from the bind. Second, and more important, the plate in the mock-up did not contain a hole where a plastic protrusion or button on the bottom of the bin fit. Dr. Nobilini concluded from a review of the photograph there was no hole in the actual plate. This opinion was a lay opinion and not based on Dr. Nobilini's area of expertise. Deposition testimony from a representative of the manufacturer noted that all such plates had a hole drilled in them within which the button fit. Moreover, it was obvious to the Court from the wear pattern shown in the photograph that it was more likely than not that there was a hole drilled in the actual plate. This deficiency is significant because all of the testimony, including Dr. Nobilini's, indicated that if the bin were seated in the hole in the base plate it would be more stable, and that it would take more force to dislodge it than if there were no hole. This goes to determining not only the subsequent *impact* sustained by Mrs. Flickinger, but also, much more significantly, what *caused* the bin to dislodge and whether it was the result of a defective product design. The Court therefore finds that the lack of evidence of substantial similarity between the bin assemblage involved in the display and the mock-up strongly indicates that Dr. Nobilini's proposed testimony on these issues is not based on sufficient facts and data.

**(c) Position of the Bin**

Dr. Nobilini's testing involved only one bin position, i.e. the bin all the way back in its housing. Admittedly the bin could well have been in a variety of positions forward of its proper position. In fact, that is an issue in this case. None of these bin positions were tested by Dr. Nobilini. This issue affects not only Dr. Nobilini's findings as to the impact sustained by the Plaintiff, but also how the accident was caused.

**2. The Reliability of Dr. Nobilini's Methodology**

The Court next moves to the issue of *reliability*. Evaluating Dr. Nobilini's methodology in the light of the non-exclusive factors outlined in *Daubert*, above, the Court considers the following.

**(a) Testable Hypothesis**

Dr. Nobilini did offer two testable hypotheses: one, that the impact generated by the bin hitting Mrs. Flickinger was insufficient to generate the injuries complained of, and two, that it was the display's improper and unsafe design, coupled by excessive force applied to the lever on the bin, that caused the accident. However, Plaintiffs contend that Dr. Nobilini failed to either electronically record his tests or create any sort of "map" of how he did his testing which the Plaintiff's could have followed to attempt to re-create Dr. Nobilini's analysis or challenge his results. While Dr. Nobilini contends that his reports provide sufficient data to re-create his tests, the Court disagrees, for reasons that will be elaborated below.

**(b) Subjection of the Method to Peer-Review**

The method used by Dr. Nobilini to measure the force required to pull the bin from

its housing onto the Plaintiff and the force with which it hit her is replete with questions. To determine the force required to dislodge the bin from the display, Dr. Nobilini used a rope attached to a force gauge. There is no indication of the length of the rope or the amount of vertical force and horizontal force used. Moreover, in the demonstration of how the testing was done during the hearing, it was apparent that there was horizontal as well as vertical force used. It was undisputed that a determination of the different forces would impact the results as to the amount of force needed to dislodge the bin. In addition, there is no suggestion that Plaintiff exerted any horizontal force on the lever when the bin dislodged and struck her. These circumstances clearly affected Dr. Nobilini's findings as to how the accident occurred.

Dr. Nobilini also failed to demonstrate the general acceptability of the use of a force gauge in this type of accident re-creation. Dr. Nobilini used the same force gauge to determine the amount of force required to dislodge the bin from the display and the amount of force with which the Plaintiff was struck, but it remains unclear exactly how he conducted these tests or how the results were determined. There was also a dispute between Dr. Nobilini and Plaintiff's experts as to the use of the force gauge to measure the force of impact on the Plaintiff. The Plaintiff's experts testified that a hybrid test dummy rigged with measuring equipment was the best method for assessing impact, yet there was no explanation as to how to keep such a dummy stable so as to simulate the actual accident. At bottom, there was no testimony that the force gauge used by Dr. Nobilini was a generally accepted method to conduct this type of testing, and significant here, there was no evidence that his method was one that has been subjected to peer review.

**(c) Known or Potential Rate of Error**

There was no evidence on this factor.

**(d) Maintenance of Standards Controlling the Techniques Operation**

There was no evidence on this factor.

**(e) Is the Method Generally Accepted**

As is often the case in these hearings, Dr. Nobilini testified that the methods he used in doing his tests were generally accepted while Plaintiff's experts testified that they were not. These methods included: use of the force gauge; use of the rope to simulate pulling the lever; the use of photographs to establish several dimensions of the display and the amount of candy in the bin at the time of the accident; and the lack of video or other recording of the tests. However, in a *Daubert* hearing, as discussed above, the evidentiary burden is on the proponent of the expert testimony, and the Court therefore finds that the Defendants failed to establish the method's acceptability.

**(f) Relationship of the Techniques to Methods which Have Been Established to be Reliable**

There was no evidence by the Defendants that the method used by Dr. Nobilini was related to other methods used in similar types of accident re-creations which have been established as reliable. This also calls to mind that the method used to determine the force allegedly used by Plaintiffs on the lever of the bin did not delineate between vertical and horizontal forces. Given that this is significant in terms of the force necessary to dislodge the bin, this factor mitigates against allowing the testimony. Further there is no evidence of the general use of a force gauge to measure impact on a human body, nor is there



evidence that such a gauge can measure forces transmitted to the cervical spine, both relevant circumstances presented here.

Therefore, Dr. Nobilini's methodology is lacking when considering the foregoing factors. In particular, it was never established that Dr. Nobilini used a method subject to peer-review; there was no evidence as to the rate of error; the general acceptability of his methodology was not established; and there was no evidence that the method was related to other methods which have been established as reliable. Defendants have failed to establish that the methods used by Dr. Nobilini in making his findings regarding *either* the cause of the accident or the impact sustained by Mrs. Flickinger are reliable.

**3. Relevant Connection or "Fit" Between the Methodology and the Facts of the Case**

Even if Dr. Nobilini's methodology was reliable in general, it has not been demonstrated to reliably connect to or "fit" the facts of this case, with respect to questions of either how the accident was caused or what impact Mrs. Flickinger sustained, and as such will not assist the jury in arriving at accurate results. The Court has already noted the failure of the testing to consider a larger variety of positions the Plaintiff might have been in at the time of the accident as well as how far away from the bin the Plaintiff may have been. This would impact the force needed to dislodge the bin and how the bin could have come out of the display, as well as the significance of the impact on Plaintiff. Also as previously mentioned, Dr. Nobilini failed to consider rotational forces involved in the impact to Plaintiff's head, and furthermore his force gauge was incapable of measuring these forces. There are also significant doubts as to the accuracy of the mock-up display, in that the base plate is different in a manner significant to determining the force necessary to

dislodge the bin as well as what ultimately caused the bin to dislodge. Possible inaccuracies in the mock-up make it an unsuitable basis for Dr. Nobilini's accident reconstruction and his findings as to what caused the bin to come out of the display. Dr. Nobilini also did not alter the location of the bin in his testing, and only tested the bin from its position seated properly in the display. All of these considerations render Dr. Nobilini's opinions as to the causes of the accident and the forces sustained by the Plaintiff not sufficiently close to the facts of this case so as to assist the jury in reaching accurate results.

#### **4. Impact of the Court's Finding on Admissible Defenses at Trial**

The Court will exclude Dr. Nobilini's entire report. As a result, he will not be permitted to testify either as to what caused the bin to become dislodged, i.e., if it was the result of a faulty design or the application of unnecessary force to the lever, or both, or whether the impact Mrs. Flickinger sustained from the falling bin was sufficient to cause the injuries she alleges. Defendants should also be aware that, while they are free to argue to the jury that there was a problem with the display of which they could not have been aware and/or that Plaintiffs were partly or wholly to blame for the accident, this is a premises liability case, not a strict product liability case, and therefore any such theories will only be permitted insofar as they are tied to the duties Defendants owed to customers in their store.

**CONCLUSION**

For the reasons stated above, Dr. Nobilini's expert testimony will be excluded. An appropriate order follows.

4/29/11  
Date

/s/ A. Richard Caputo  
A. Richard Caputo  
United States District Judge

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(JUDGE CAPUTO)

**ORDER**

**NOW**, this 29th day of April, 2011, **IT IS HEREBY ORDERED THAT** Plaintiffs' Motion in Limine to exclude the expert reports and testimony of Dr. Nobilini is **GRANTED**.

/s/ A. Richard Caputo  
A. Richard Caputo  
United States District Judge